Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LUIS FELIPE CABRERA,
CHANDRASEKARAN MOHAN and
INDERPAL SINGH NARANG

Appeal No. 1999-2233
Application 08/794,691

ON BRIEF

Before HAIRSTON, RUGGIERO, and BARRY, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 through 20.

The disclosed invention relates to a method of file backup in a database system, and to a method of restoring database contents in a database system.

Claims 1 and 10 are illustrative of the claimed invention, and they read as follows:

1. A method of backup in a database system having references to files stored in at least one file system external to the database system, comprising the steps of:

establishing a reference in the database system to a file in the file system; and

in response to establishing the reference, storing a backup copy of the file in storage external to the file system.

10. A method of restoring a database system having references to files stored in at least one file system external to the database system, comprising the steps of:

placing in the database a reference to a file in the file system;

making a record in the file system of the reference, the record initially indicating the existence of the reference, the records being changed to indicate deletion of the reference if the reference is deleted from the database system;

initiating a restoration of database contents that existed at a time of database system operation (restore time); and

(a) if the reference is placed in the database system prior to the restore time and the record indicates that the reference was deleted, changing the reference to indicate that the reference exists; or

(b) if the reference was placed in the database system subsequent to the restore time and the record indicates that

the reference exists, changing the record to indicate that the reference is deleted.

The references relied on by the examiner are:

Walls	5,163,148	Nov. 10, 1992
Schwendemann et al. (Schwendemann)	5,446,884	Aug. 29, 1995
Wood	5,515,502	May 7, 1996

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Walls.

Claims 2 through 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Walls in view of Wood.

Claims 10 through 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Walls in view of Wood and Schwendemann.

Reference is made to the final rejection (paper number 8), the brief (paper number 11) and the answer (paper number 12) for the respective positions of the appellants and the examiner.

OPINION

We have carefully considered the entire record before us, and we will sustain the 35 U.S.C. § 102(b) rejection of claim 1 and the 35 U.S.C. § 103(a) rejection of claims 2 through 9. On the other hand, we will reverse the 35 U.S.C. § 103(a)

rejection of claims 10 through 20.

Turning first, as we must, to the 35 U.S.C. § 102(b) rejection of claim 1, appellants argue (brief, page 7) that "the Examiner should give the specification, the illustrations, the Tables, and the Appendix considerable weight in interpreting how Claim 1 distinguishes over the Walls patent." The claims on appeal should be read in light of appellants' disclosure; however, reading a claim in light of the disclosure to interpret broadly worded limitations explicitly recited in the claim is a quite different thing from reading limitations of the specification into a claim to thereby narrow the scope of the claim by implicitly adding disclosed limitations which have no express basis in the claim. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). In other words, the broadly worded limitations of claim 1 on appeal do not encompass "'efr' data," "data structure" or "metadata" (brief, pages 7 and 8). When the limitations of claim 1 are given their broadest reasonable interpretation (brief, pages 7 and 8), we agree with the examiner (answer, page 6) that in Walls:

[W]hen a digital data processing system determines

> **that a file [stored therein] is to be backed up, a backup control command is invoked [by an operator] and the operating system invokes a backup control program to actually perform the backup operation. Then, the backup control program initiates a backup operation; and finally, files are backed up onto storage media, whether another disk or a tape, which may be removed from the digital data processing system and stored in an external location.**

The "database system" disclosed by Walls is controlled by the noted operator and the applications programs (column 4, lines 43 through 52 and column 6, lines 45 through 54), and the "file system" is composed of the files stored on disks and managed by the file management system (column 5, lines 10 through 21). The "reference in the database system to a file in the file system" (brief, page 8) is an explicit command from the operator's console to a specific file in the file system (column 6, lines 47 through 49). When the backup file is completed, and the backup disk is stored in an external location (column 6, line 68 through column 7, line 3), the Walls' system has completed the task of "storing a backup copy of the file in storage external to the file system. . ." (brief, page 8). Since all of the broadly worded limitations of claim 1 read on the teachings of Walls, the 35 U.S.C. § 102(b) rejection of claim 1 is sustained.

Turning next to the 35 U.S.C. § 103(a) rejection of claims 2 through 9, we agree with the examiner (answer, pages 6 and 7) that Walls achieves the verification step of claim 2 when "[f]ollowing the backup operation, the backup control program sets the consistent state flag 35 indicating that the operations were completed (step 63)" (column 7, lines 10 through 12). Appellants' arguments (brief, page 9) concerning "[r]eferential integrity" and "synchronism" during the backup operation are not commensurate in scope with the claimed invention. We likewise agree with the examiner (final rejection, page 3) that Wood discloses "garbage collection after database backup (col. 3, lines 7-11)" as set forth in claim 3, and that it would have been obvious to one of ordinary skill in the art to use such a technique in Walls to increase the speed at which backup takes place (final rejection, page 4). Appellants' arguments (brief, pages 11 and 12) for claims 4 through 9 mirror those made for claims 1 through 3. Thus, the 35 U.S.C. § 103(a) rejection of claim 2 through 9 is sustained.

Turning lastly to the 35 U.S.C. § 103(a) rejection of claims 10 through 20, we agree with the appellants (brief,

pages 13 and 14) that the specifically claimed steps of these claims are neither taught by nor would have been suggested by the file backup teachings of Walls, the garbage collection teachings of Wood and the database recovery teachings of Schwendemann (column 1, lines 20 through 22). Thus, the 35 U.S.C. § 103(a) rejection of claims 10 through 20 is reversed.

DECISION

The decision of the examiner rejecting claim 1 under 35 U.S.C. § 102(b) and claims 2 through 9 under 35 U.S.C. § 103(a) is affirmed. The decision of the examiner rejecting claims 10 through 20 under 35 U.S.C. § 103(a) is reversed. Accordingly, the decision of the examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

KENNETH W. HAIRSTON Administrative Patent Judge	)
JOSEPH F. RUGGIERO Administrative Patent Judge	) BOARD OF PATENT APPEALS AND INTERFERENCES
LANCE LEONARD BARRY Administrative Patent Judge	)

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